U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 2



December 11, 2020

BY ELECTRONIC MAIL

Robert Law, Ph.D. de maximis, inc. 186 Center Street, Suite 290 Clinton, New Jersey 08809

Re: Re: Lower Passaic River Study Area Draft Final Upper 9-Mile Source Control Interim Remedy Feasibility Study – Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study (Agreement) CERCLA Docket No. 02-2007-2009

Dear Dr. Law:

The U.S. Environmental Protection Agency (EPA) has reviewed the Cooperating Parties Group's (CPG) December 4, 2020, Draft Final Upper 9-Mile Source Control Interim Remedy Feasibility Study (IR FS) prepared by Integral for the CPG for the Lower Passaic River Study Area.

EPA reviewed the revised IR FS report submitted by the CPG and the CPG's response to comments. Enclosed are two minor comments that were not addressed completely. Please incorporate the changes in the final version of the IR FS. EPA conditionally approves the Draft Final IR FS as long as these comments are addressed and subject to any changes that may be identified as a result of the release of the Proposed Plan for public comment, and the review of comments received. The New Jersey Department of Environmental Protection has no further comments. Please finalize the report in accordance with Section X, Paragraph 44(a) of the Agreement.

If there are any questions or clarifications needed, please contact me to discuss.

Sincerely,

Diane Salkie, Remedial Project Manager Lower Passaic River Study Area RI/FS

Vira tour

Cc: Zizila, F. (EPA) Sivak, M. (EPA) Hyatt, B. (CPG) Potter, W. (CPG) Nickerson, J. (NJDEP)

No	Section	General or Specific	Page	Comment	CPG Response	EPA Evaluation
1.	Executive Summary	General	n/a	Use "sediment" (singular) as opposed to "sediments" (plural), where appropriate, consistent with the CPG's prior decision to use the singular. As examples: In the first paragraph under Rationale for a Source Control Interim Remedy, revise the final sentence to read "which would in turnreduce concentrations in surface sediment_sediments where". In the first paragraph under Nature and Extent of Contamination in the Upper 9 Miles, revise the final sentence to read "Sediment Sediments with the highestwere was deposited in the 1960s". Review and revise the Executive Summary, and the	Complete	The response and edits are acceptable.
				remainder of the document beyond the Executive Summary, to ensure consistency.		
2.	Executive Summary	General	n/a	The following acronyms/abbreviations are not defined in the Executive Summary: DDT USACE ng/kg mg/kg in.	Complete. Note that USACE is not used in the Executive Summary.	The response and edits are acceptable.
				Review and revise the Executive Summary, and the remainder of the document beyond the Executive Summary, to ensure that acronyms/abbreviations are properly defined at their first usage.		

3.	Executive Summary	Specific	xxi	The bulleted descriptions of Alternatives 2, 3, and 4 are confusing in suggesting that the total PCBs RAL would be attained, as opposed to incorporated in order to attain a total PCBs SWAC at or below background. This could be particularly confusing in light of the expressed intent to attain a specific 2,3,7,8-TCDD SWAC target for each alternative and the definition of RAL in Section 1.3.1. Revise these bulleted descriptions (and make the same revisions in Section 7) to reflect "Alternative X: Targeted dredge and cap from RM 8.3 to RM 15 to attain a post-IR 2,3,7,8-TCDD SWAC of X ng/kg and incorporating a total PCBs RAL of 1 mg/kg".	Complete	The response and edits are acceptable.
4.	7	Specific	7-1	The bulleted descriptions of Alternatives 2, 3, and 4 are confusing in suggesting that the total PCBs RAL would be attained, as opposed to incorporated in order to attain a total PCBs SWAC at or below background. This could be particularly confusing in light of the expressed intent to attain a specific 2,3,7,8-TCDD SWAC target for each alternative and the definition of RAL in Section 1.3.1. Revise these bulleted descriptions to reflect "Alternative X: Targeted dredge and cap from RM 8.3 to RM 15 to attain a post-IR 2,3,7,8-TCDD SWAC of X ng/kg and incorporating a total PCBs RAL of 1 mg/kg".	Complete	The response and edits are acceptable.
5.	7.1.1	Specific	7-4	As previously communicated to the CPG via e-mail, revise the final sentence in number 1 under "The following steps would be performed to determine the areas where dredging without capping would be employed:" to read "These depths would be used to refine define the termination depth of the PDI borings in each area of the river, if greater than the nominal PDI boring depth (see Section 7.1.6); it which is anticipated that data would need to extend 1-ft beyond the depth at which the costs of the two dredging options are equal."	Complete. Note a minor change to the revision, for clarity:is anticipated that data cores would need to extend 1-ft beyond the depth	The response and edits are acceptable.

6.	7.1.6	Specific	7-10	As previously communicated to the CPG via e-mail, revise the third sub-bullet under "The PDI is anticipated to include:" to read "Sediment sampling is anticipated to include coring to a nominal depth of 4 ft. Anticipated coring intervals are 0 to 0.5 ft, 0.5 to 1.5 ft, 1.5 to 2.5 ft, and 2.5 to 4 ft. Core depths may be extended and/or core intervals may be refined during the PDI to ensure achievement of the data use objectives:" Also as previously communicated to the CPG, delete footnote 48 ("Subsurface cores would be archived") from the IR FS.	Complete	The response and edits are acceptable.
7.	8.1.4.2	Specific	8-12	In the second, third and fourth bullets for the metric Transport under Short-Term Effectiveness, correct the footnote number in the parenthetical "(model initiation to year 8 ^{Error! Bookmark not defined.})" torefer to footnote 60 instead of 53.	Complete	The response and edits are acceptable.
8.	8.1.4.2	Specific	8-13	The text under Cost suggests the most recent OMB 30-year discount rate was used in the cost analysis. The OMB circular was updated in 2019, and the discount rate for a 30-year project from the 2019 circular is 0.4 percent (compared to 1.5 percent from the 2018 OMB circular). The IR FS cost estimate was prepared prior to the release of the 2019 circular and the 2018 rate is reasonable for purposes of the IR FS, but the discount rate used is not the most recent. Update the IR FS, here and wherever else relevant (e.g., Sections 8.3.2.2, 8.3.3.2, 8.3.4.2, 8.3.5.2, and 8.4.2.5), to remove the language that the 30-year discount rate is "the most recent". For example, revise the language in Section 8.1.4.2 to read "The EPA-default discount rate of 7 percent was compared to 1.5 percent, the most recent a reasonable expected discount rate for a 30-year project based on information published by the U.S. Office of Management and Budget	Complete	The response and edits are partially acceptable. Footnote c for Tables ES-4 and 8-4 implies that the 7% discount rate is from OMB circular A-94. As the text of the IR FS and footnote b of Table 8-5 indicate, the 7% discount rate is EPA's "default" or "preferred" and derives from other EPA guidance (USEPA 2000a). Revise footnote c for Tables ES-4 and 8-4 to more accurately reflect that the 7% discount rate is supported by USEPA 2000a. In addition, for consistency within the overall document including the

				(OMB) (OMB 2018)."		references section, revise footnote b for Table 8-5 to cite USEPA 2000a (instead of USEPA 2000).
9.	8.3.2.2	Specific	8-28	Under Reduction in Toxicity, Mobility, or Volume through Treatment, the text states that Alternative 2 would result in the removal of 590 g of 2,3,7,8-TCDD (of the approximately 1,570 g in the upper 2.5 ft of the sediment bed from RM 8.3 to RM 15) and 810 kg of PCBs (of the approximately 3,300 kg in the upper 2.5 ft of the sediment bed from RM 8.3 to RM 15). CPG has verified separately that the total mass inventory of 2,3,7,8-TCDD and PCBs as referenced (1,570 g and 3,300 kg, respectively) reflects all depth from RM 8.3 to RM 15 and not only the upper 2.5 ft of the sediment bed from RM 8.3 to RM 15. Revise here (and throughout the IR FS) to provide the accurate value for total mass inventory for the upper 2.5 ft of the sediment bed. This comment also applies to Sections 8.3.3.2 (Alternative 3), 8.3.4.2 (Alternative 4), and 8.3.5.2 (Alternative 5), and to other portions of the document where these values are relevant (e.g., Section 8.4.2.2).	The text has been updated to reflect the correct mass values for the upper 2.5 ft depth interval, per telephone and email communication between R. Law and D. Salkie on 10/20/20.	The response and edits are partially acceptable. EPA has evaluated the revised information, and one additional location where the revised mass inventory values are relevant is the visual representation of IR alternative performance in Tables ES-5 and 8-7. Specifically, the representation of alternative performance for criterion 4 (Reduction of Toxicity, Mobility, or Volume through Treatment) is influenced by the mass removal efficiency for the upper 2.5 ft of the sediment bed. For this criterion, use a 75% filled circle for Alternative 2, an 80% filled circle for Alternative 3, and an 85% filled circle for Alternative 4.
10	4.2.1	Specific	9	EPA provided a prior comment to revise the first sentence in Section 4.2.1 of Appendix B to read "The subsurface RAL for RAO 2 was established by USEPA and CPG and was set to twice the surface RAL for both 2,3,7,8-TCDD and total PCBs (USEPA 2019a) as a site management decision." The CPG indicated that this revision was made but did not provide a revised version of Appendix B for EPA to verify the edit. EPA is reiterating the comment for certainty.	Complete, Appendix B provided	The response and revisions are acceptable.